

## ABSTRACT

A thin and wide area lithium ion secondary battery is disclosed. The lithium ion secondary battery has a container having a flange extended outwardly from a region where a terminal is located in the container, and constituted by a can and a cap having preferred shapes, respectively, wherein the flange of the ~~cap~~can is welded at an outer surface of the flange to an outer surface of the flange of the cap by means of micro-arc welding. ~~According to the present invention,~~ A cooling jig can be easily installed to the container, allowing efficient removal of problems caused by heat upon welding, resulting in allowing application of micro-arc welding thereto without generating damage of the interior or the battery caused by heat. Accordingly, more economical and stable butt welding can be performed, thereby remarkably reducing defect occurrence rates causing leakage problem of the resulting battery, and manufacturing costs of the lithium secondary battery.